

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A device for processing images, comprising:
a compressing/coding unit configured to encode image data including a plurality of color components to produce encoded image data;
a memory unit configured to store the encoded image data produced by said compressing/coding unit, the memory unit having at least one memory space assigned to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components;

a distribution-measurement unit configured to measure a distribution of the plurality of color components by counting, with respect to each of a plurality of areas into which a color space is divided, a number of pixels of the encoded image data whose color components belong to a given area; and

a memory-control unit configured to release the at least one memory space assigned to the part of the encoded image data and to record data indicative of one of the plurality of color components areas on which the distribution concentrates in said memory unit, when the distribution concentrates on the one of the plurality of color components in response to a detection by said distribution-measurement unit that the distribution concentrates on said one of the areas.

Claim 2 (Previously Presented): The device as claimed in claim 1, wherein said compressing/coding unit includes:

a color-conversion unit configured to convert an input image into the image data including the plurality of color components;

a compression unit configured to compress the image data supplied from said color-conversion unit to provide compressed image data; and
a quantization unit configured to quantize the compressed image data supplied from said compression unit.

Claim 3 (Previously Presented): The device as claimed in claim 2, wherein said compression unit is configured to perform sub-band conversion to compress the image data supplied from said color-conversion unit.

Claim 4 (Previously Presented): The device as claimed in claim 2, wherein said compressing/coding unit further includes a block-division unit configured to divide the input image into a plurality of blocks before the input image is supplied to said color-conversion unit.

Claim 5 (Previously Presented): The device as claimed in claim 1, wherein the encoded image data produced by said compressing/coding unit includes brightness information, structure information, and color information.

Claim 6 (Previously Presented): The device as claimed in claim 1, wherein said compressing/coding unit includes:

a compression unit configured to compress the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and
a quantization unit configured to quantize the compressed image data supplied from said compression unit.

Claim 7 (Previously Presented): The device as claimed in claim 6, wherein said distribution-measurement unit measures the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) component.

Claim 8 (Currently Amended): An image processing system, comprising:

- a scanner unit configured to read an original image;
- a compressing/coding unit configured to encode image data including a plurality of color components to produce encoded image data;
- a memory unit configured to store the encoded image data produced by said compressing/coding unit, the memory unit having at least one memory space assigned to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components;
- a distribution-measurement unit configured to measure a distribution of the plurality of color components by counting, with respect to each of a plurality of areas into which a color space is divided, a number of pixels of the encoded image data whose color components belong to a given area;
- a memory-control unit configured to release the at least one memory space assigned to the part of the encoded image data and to record data indicative of one of the ~~plurality of color components areas on which the distribution concentrates~~ in said memory unit, ~~when the distribution concentrates on the one of the plurality of color components in response to a detection by said distribution-measurement unit that the distribution concentrates on said one of the areas; and~~
- a printer unit configured to print data obtained by decoding the encoded image data stored in said memory unit.

Claim 9 (Previously Presented): The image processing system as claimed in claim 8, further comprising an image decoding unit configured to:

read the encoded image data and the data indicative of the one of the plurality of color components from said memory unit,
decode the encoded image data so as to provide decoded image, and
determine color components of the decoded image according to the data indicative of the one of the plurality of color components.

Claim 10 (Previously Presented): The image processing system as claimed in claim 8, wherein said compressing/coding unit includes:

a color-conversion unit configured to convert the original image into the image data including the plurality of color components;
a compression unit configured to compress the image data supplied from said color-conversion unit to provide compressed image data; and
a quantization unit configured to quantize the compressed image data supplied from said compression unit.

Claim 11 (Previously Presented): The image processing system as claimed in claim 10, wherein said compression unit is configured to perform sub-band conversion to compress the image data supplied from said color-conversion unit.

Claim 12 (Previously Presented): The image processing system as claimed in claim 10, wherein said compressing/coding unit further includes a block-division unit configured to divide the original image into a plurality of blocks before the data of the original image is supplied to said color-conversion unit.

Claim 13 (Previously Presented): The image processing system as claimed in claim 8, wherein the encoded image data produced by said compressing/coding unit includes brightness information, structure information, and color information.

Claim 14 (Previously Presented): The image processing system as claimed in claim 8, wherein said compressing/coding unit includes:

a compression unit configured to compress the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and

a quantization unit configured to quantize the compressed image data supplied from said compression unit.

Claim 15 (Previously Presented): The image processing system as claimed in claim 14, wherein said distribution-measurement unit measures the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) component.

Claim 16 (Currently Amended): A method of encoding images, comprising steps of: encoding image data including a plurality of color components to produce encoded image data;

assigning at least one memory space of a memory unit to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components; measuring a distribution of the plurality of color components concurrently with encoding of the image data by counting, with respect to each of a plurality of areas into which a

color space is divided, a number of pixels of the encoded image data whose color components belong to a given area; and

releasing the at least one memory space assigned to the part of the encoded image data and recording data indicative of one of the ~~plurality of color components areas on which the distribution concentrates~~ in said memory, ~~when the distribution concentrates on the one of the plurality of color components in response to a detection by said distribution-measurement unit that the distribution concentrates on said one of the areas.~~

Claim 17 (Previously Presented): The method as claimed in claim 16, wherein encoding of the image data includes :

compressing the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and quantizing the compressed image data.

Claim 18 (Previously Presented): The method as claimed in claim 17, wherein measuring of the distribution of the plurality of color components includes measuring the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) component.

Claim 19 (Currently Amended): A computer-readable medium having a program embodied therein for causing a computer to encode images, said program comprising program-code for:

encoding image data including a plurality of color components to produce encoded image data;

assigning at least one memory space of a memory unit to a part of the encoded image data, wherein the part of the encoded image data represents the plurality of color components; measuring a distribution of the plurality of color components concurrently with encoding of the image data by counting, with respect to each of a plurality of areas into which a color space is divided, a number of pixels of the encoded image data whose color components belong to a given area; and

releasing the at least one memory space assigned to the part of the encoded image data and recording data indicative of one of the plurality of color components areas on which the distribution concentrates in said memory, when the distribution concentrates on the one of the plurality of color components in response to a detection by said distribution-measurement unit that the distribution concentrates on said one of the areas.

Claim 20 (Previously Presented): The computer-readable medium as claimed in claim 19, wherein encoding of the image data includes:

compressing the image data including the plurality of color components to provide compressed image data, wherein the plurality of color components are R, G, and B components; and
quantizing the compressed image data.

Claim 21 (Previously Presented): The computer-readable medium as claimed in claim 20, wherein measuring of the distribution of the plurality of color components includes measuring the distribution of the plurality of color components with respect to a (R-G) component and a (B-G) component.

Claim 22 (Previously Presented): The device as claimed in claim 1, wherein said distribution-measurement unit is configured to measure the distribution of the plurality of color components while the image data including a plurality of color components is being encoded.

Claim 23 (Previously Presented): The device as claimed in claim 1, wherein the distribution concentrating on the one of the plurality of color components correlates to the one of the plurality of color components occupying at least 80% of the plurality of color components.

Claim 24 (Previously Presented): The device as claimed in claim 8, wherein said distribution-measurement unit is configured to measure the distribution of the plurality of color components while the image data including a plurality of color components is being encoded.

Claim 25 (Previously Presented): The device as claimed in claim 8, wherein the distribution concentrating on the one of the plurality of color components correlates to the one of the plurality of color components occupying at least 80% of the plurality of color components.

Claim 26 (Previously Presented): The device as claimed in claim 16, wherein the distribution concentrating on the one of the plurality of color components correlates to the one of the plurality of color components occupying at least 80% of the plurality of color components.

Claim 27 (Previously Presented): The device as claimed in claim 19, wherein the distribution concentrating on the one of the plurality of color components correlates to the one

of the plurality of color components occupying at least 80% of the plurality of color components.